Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended) A method for preparing a native, acellular tissue replacement comprising the steps of:

obtaining a nerve tissue;

soaking the nerve tissue for at least six hours in a solution comprising one or more sulfobetaines;

treating the nerve tissue in a mixture of one or more sulfobetaines with an anionic surface-active detergent; and

washing the nerve tissue in one or more solutions of a buffered salt to remove the excess anionic surface-active detergent to form the native, acellular nerve tissue replacement with significantly reduced immunologic response.

Claim 2 (currently amended) The method of claim 1, further comprising the step of storing the native, acellular nerve tissue replacement in a buffered salt solution until needed.

Claim 3 (original) The method of claim 1, wherein the sulfobetaines have hydrophilic tails of 10 to 16 carbons.

Claim 4 (currently amended) The method of claim 1, further comprising the step of:
adhering one or more bioactive agents to the tissue.

Claims 5-6 (cancelled)

Claim 7 (currently amended) The method of claim 4, wherein the one or more bioactive compounds comprises a drug.

Claim 8 (cancelled)

Claim 9 (currently amended) The method of claim 1, wherein the native, acellular nerve tissue replacement comprises a structure selected from the group consisting of a suture, tube, sheet, film, scaffold, valve, limb replacement, tissue transplant, and joint for delivery into the body.

Claim 10 (original) The method of claim 1, wherein the sulfobetaine comprises SB-16.

Claim 11 (previously presented) The method of claim 1, wherein the anionic surface-active detergent comprises Triton X-200.

Claim 12 (currently amended) The method of claim 1, wherein the step of washing the nerve tissue comprises one or more washes in a buffered salt solution comprising 100 mM sodium and 50 mM phosphate for at least 15 minutes each.

Claim 13 (currently amended) The method of claim 1, wherein the nerve tissue is harvested from a mammalian cadaver.

Claim 14 (currently amended) The method of claim 13, wherein the nerve tissue is cleaned of fat and blood after harvesting and rinsed two or more times in deionized distilled water.

Claim 15(currently amended) A native, acellular nerve tissue replacement made by the method of claim 1.

Claim 16 (currently amended) A kit for tissue replacement comprising the native, acellular nerve tissue replacement of claim 15.

Claim 17 (currently amended) The kit of claim 16, wherein the native, acellular nerve tissue replacement further comprises a ~~suture,~~ a tube, sheet, a film, a scaffold, ~~valve, limb replacement,~~ or a nerve tissue transplant ~~or a joint~~.

Claim 18 (currently amended) The kit of claim 17, wherein the native, acellular nerve tissue replacement further comprises a polymer, a bioactive compound or combinations thereof.

Claim 19 (currently amended) The kit of claim 17, further comprising a sheet of instructions for use of the native, acellular nerve tissue replacement.

Claims 20-40 (cancelled)

Claim 41. (currently amended) A method for preparing a native, acellular nerve tissue replacement comprising the steps of:

obtaining a nerve tissue;

soaking the nerve tissue for at least six hours in a solution comprising one or more sulfobetaines;

treating the nerve tissue in a mixture of one or more sulfobetaines with an anionic surface-active detergent; and

washing the nerve tissue in one or more solutions of a buffered salt to remove the excess anionic surface-active detergent to form the native, acellular nerve tissue replacement, wherein the basal laminae and endoneurium layer retain substantially the native extracellular matrix structure ~~their natural and generally original structure.~~

Claim 42. (currently amended) A method for preparing a native, acellular tissue replacement comprising the steps of:

obtaining a tissue;

soaking the tissue for at least six hours in a solution comprising one or more sulfobetaines;

treating the tissue in a mixture of one or more sulfobetaines with an anionic surface-active detergent; and

washing the tissue in one or more solutions of a buffered salt to remove the excess anionic surface-active detergent to form the native, acellular tissue replacement wherein the tissue replacement ~~comprises a generally native structure and integrity.~~ has a basal laminae and endoneurium layer that retain substantially the native extracellular matrix structure and integrity.

Claim 43. (currently amended) The method of claim 42, wherein the native, acellular tissue replacement, when implanted, has a T-cell mediated immune response that is less than an immune response triggered by an alloantigenic implant.

Claim 44. (previously presented) The method of claim 42, wherein the native acellular tissue replacement allows for higher axon density when implanted relative to a tissue graft made acellular by a freeze/thaw or a Triton X-100 process.